

**Subject:** Orca Critical Habitat Comments  
**From:** Val and Leslie Veirs <vveirs@coloradocollege.edu>  
**Date:** Wed, 26 Jul 2006 14:14:15 -0700  
**To:** orcahabitat.nwr@noaa.gov  
**CC:** Ed.Bowlby@noaa.gov, Lynne.Barre@noaa.gov

Hello,

On Monday (7/25/2006) the Whale Museum Board unanimously approved the attached public comment for NOAA's Critical Habitat process.

Please enter these comments into the public record as part of your Critical Habitat public process.

If possible, please confirm that you have received and entered these comments from the public.

Thank you,

Val Veirs  
Vice-Chair: Board of Directors  
The Whale Museum  
Friday Harbor, WA

<b>TWM_CriticalHabitatCommentsJuly24.pdf</b>	<b>Content-Type:</b> application/pdf <b>Content-Encoding:</b> base64
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**Comments on “Critical Habitat” for protection of the Southern Resident Orcas**

First of all, thank you NOAA and NMFS for choosing to list the Southern Residents as endangered under the Endangered Species Act and for proposing extensive critical habitat areas in this rule-making action. NOAA administrators and scientists deserve special thanks for their perseverance and dedication in bringing the proposal we are discussing today forward.

NOAA/NMFS has proposed three Critical Habitat areas that are frequented by Southern Residents.. Area 1 (Core Summer — San Juan Island region), Area 2 (Fall — downsound) and Area 3 (Strait of Juan de Fuca —transiting to and from the ocean).. This large area encompasses all of the U.S. inland marine waters of Puget Sound exclusive of areas shallower than 20 feet in depth and exclusive of listed military zones.

In those areas, NOAA/NMFS lists three Primary Constituent Elements (PCE) that must be protected in order to ensure the conservation of orcas: (1) Water quality – to support growth and development of the orca population, (2) Prey species – protecting quality, quantity, and availability of the orca’s food supply, and (3) Passage conditions – ensuring room for migration, resting, and foraging.

These three Critical Habitat areas and three Primary Constituent Elements are excellent and essential steps toward conserving and protecting the Southern Resident orcas. The undersigned members of the Board of the Whale Museum congratulates NOAA/NMFS for bringing these recommended policies before the public for discussion.



Photo by Val Veirs - June 2006

We wish to suggest two additions to the Critical Habitat determination:

Underwater acoustic environment.

We ask that a fourth Primary Constituent Element be added – Underwater acoustic environment. It is well known and detailed in the Critical Habitat Federal Register document as well as the recent Biological Report (and many earlier similar summaries) that orcas use sound to communicate, navigate, and forage. Underwater sounds from human activities are also well known to impede these activities if such sounds overlap specific frequency ranges and are of sufficient received levels and time durations. Just as the Southern Residents need adequate water quality, available prey and room to move, they need to be able to hear. Underwater sound is a habitat condition just as is water quality, prey and passage. Intense sounds will repel orcas and chronic high levels of sounds will reduce orcas ability to find prey by limiting their vocal communication and ability to use echolocation for foraging. Because underwater sounds can travel long distances and also can be focused by reflections from the sea-floor causing especially intense zones of noise, actions taken at one place may have serious, deleterious effects at a distance. Steps should be taken to avoid both acute and chronic underwater noise effects and hence Underwater acoustic environment should be a PCE along with Water quality, Prey species, and Passage conditions.



Photo by Val Veirs - June 2006

### Critical Habitat in the Ocean

We ask that some critical regions of the Southern Resident's ocean habitat be included. About half the time the endangered Southern Resident orcas are in the ocean. Almost all of the orca deaths that have precipitated their listing under the Endangered Species Act have occurred in the winter while the orcas were not in Puget Sound. Furthermore, this is the time when salmon prey are least available and foraging is likely most difficult. To establish some protection of Southern Resident's ocean habitat, a zone near the shore such as the already defined Olympic Coast National Marine Sanctuary off the Washington coast or appropriate areas near the mouth of each significant salmon stream or river that flows into the ocean from Washington and Oregon should be included as Critical Habitat. As further research progresses, the boundaries of these critical habitat zones can be changed but steps should be taken now to protect those areas that are very likely to prove essential after future research is completed and to inform all parties of the importance of the ocean to the survival of the Southern Resident orcas.

Agreed upon on July 24, 2006 –

Claudia Mills

Phil Green

Kerwin Johnson

Patricia Moran-Hodge

Val Veirs

members: The Whale Museum Board



Washington Coast National Marine Sanctuary